

Amendments to the Claims:

The following claims will replace all prior versions of the claims in this application (in the unlikely event that no claims follow herein, the previously pending claims will remain):

1. (Currently Amended) A buffer ~~installation allocation~~ method supporting a ~~detection-based and avoidance-based~~ consistency maintenance policy in a shared disk-based multi-DBMS, the method comprising the steps of:

(a) ~~when a page identifier, access modes (read, write) and consistency maintenance scheme (detection, avoidance) are selected and a buffer is requested to install, calculating a required buffer locking mode required based on a scheme mode to buffer lock mode matrix a following matrix (SMTBM) shown below when a block identifier, an access mode (read, write) and a consistency maintenance policy (detection, avoidance) are selected and a buffer manager is requested to allocate a block on a disk to access actual data; and~~

(b) requesting a global locking manager to lock a buffer in the calculated buffer locking mode in case ~~that an the obtained buffer locking mode is less than the calculated buffer locking mode or a version of a loaded block is lower than a required version locking mode when the~~ detection-based consistency maintenance scheme is selected, and approving buffer ~~installation allocation~~ otherwise,

wherein a detection-based consistency maintenance scheme and an avoidance-based consistency maintenance scheme are integrated in a single procedure to interwork with each other.

Policy	Access	
	Read	Write
Detection	WS	WX
Avoidance	S	X

2. (Currently Amended) The method as claimed in claim 1, wherein the step (b) includes the step of:

(b-1) when succeeding to receive a block in state that the buffer is requested to lock, approving to ~~install~~ allocate the buffer; and

(b-2) when failing to receive a block, reading the block from a disk to approve to ~~install~~ allocate the buffer.

3. (Currently Amended) A method of processing a global locking request in a DBMS operated in a shared disk-based multi-system, the method comprising the steps of:

(a) obtaining a locking by an update authority (WX, X) in a system that has obtained a requested locking, ~~transferring~~ allocating a corresponding block to a system that cached the corresponding block, and requesting to update a lock authority;

(b) determining whether the system is not compatible to a requested lock according to a ~~following~~ buffer lock compatibility matrix (BLCM) shown below in the system that has obtained the requested lock in a read mode (WS, S); and

(c) instructing a system to update the lock authority, if the system being is determined not to be compatible.

Convention	Request			
	WS	S	WX	X
NL	T	T	T	T
WS	T	T	T	F
S	T	T	F	F
WX	T	F	F	F
X	F	F	F	F

4. (Currently Amended) A method of a global locking manager for processing a locking authority update request and a block allocation transfer request in a DBMS operated in a shared disk-based multi-system, the method comprising the steps of:

(a) when a current system has obtained a locking by an update authority (WX, X) and a current block is updated, writing a log forcedly about the current block based on write ahead logging (WAL) and writing a corresponding block on a disk or transferring allocating the corresponding block through a transfer path;

(b) updating a currently owned buffer locking mode to satisfy a buffer locking mode requested by a remote system using a following buffer lock revocation matrix (BLRM) shown below; and

(c) removing a corresponding block completely when returning a buffer locking as a result of the step (b), and completing to update an ownership otherwise.

Convention	Request			
	WS	S	WX	X
WS	WS	WS	WS	NL
S	S	S	WS	NL
WX	WX	S	WS	NL
X	WX	S	WS	NL